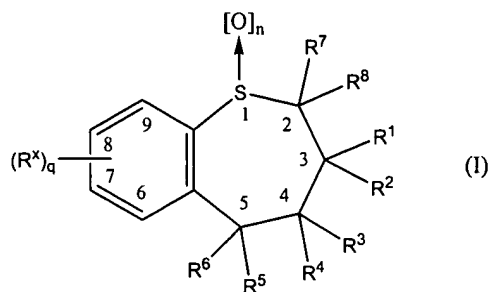


This Listing of Claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

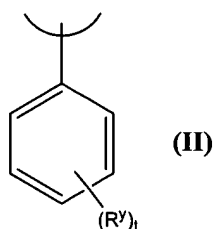
Claims 1-352 (canceled)

Claim 353 (new) A compound of formula I:



wherein:

q is 1 or 2; n is 2; R<sup>1</sup> and R<sup>2</sup> are each alkyl; R<sup>3</sup> is hydroxy; R<sup>4</sup> and R<sup>6</sup> are hydrogen; and R<sup>5</sup> has the formula (II)



wherein:

t is an integer from 0 to 5;

one or more R<sup>y</sup> are independently selected from the group consisting of alkyl, alkenyl, alkynyl, polyalkyl, polyether, aryl, haloalkyl, cycloalkyl, heterocycle, arylalkyl, halogen, oxo, OR<sup>13</sup>, NR<sup>13</sup>R<sup>14</sup>, SR<sup>13</sup>, S(O)R<sup>13</sup>, SO<sub>2</sub>R<sup>13</sup>, SO<sub>3</sub>R<sup>13</sup>, NR<sup>13</sup>OR<sup>14</sup>, NR<sup>13</sup>NR<sup>14</sup>R<sup>15</sup>, NO<sub>2</sub>, CO<sub>2</sub>R<sup>13</sup>, CN, OM, SO<sub>2</sub>OM, SO<sub>2</sub>NR<sup>13</sup>R<sup>14</sup>, C(O)NR<sup>13</sup>R<sup>14</sup>, C(O)OM, COR<sup>13</sup>, NR<sup>13</sup>C(O)R<sup>14</sup>, NR<sup>13</sup>C(O)NR<sup>14</sup>R<sup>15</sup>, NR<sup>13</sup>CO<sub>2</sub>R<sup>14</sup>, OC(O)R<sup>13</sup>, OC(O)NR<sup>13</sup>R<sup>14</sup>, NR<sup>13</sup>SOR<sup>14</sup>, NR<sup>13</sup>SO<sub>2</sub>R<sup>14</sup>, NR<sup>13</sup>SONR<sup>14</sup>R<sup>15</sup>, NR<sup>13</sup>SO<sub>2</sub>NR<sup>14</sup>R<sup>15</sup>, P(O)R<sup>13</sup>R<sup>14</sup>, P<sup>+</sup>R<sup>13</sup>R<sup>14</sup>R<sup>15</sup>A<sup>-</sup>, P(OR<sup>13</sup>)OR<sup>14</sup>, S<sup>+</sup>R<sup>13</sup>R<sup>14</sup>A<sup>-</sup>, and N<sup>+</sup>R<sup>9</sup>R<sup>11</sup>R<sup>12</sup>A<sup>-</sup>; and

A<sup>-</sup> is a pharmaceutically acceptable anion and M is a pharmaceutically acceptable cation; and

said  $R^y$  alkyl, alkenyl, alkynyl, polyalkyl, polyether, aryl, haloalkyl, cycloalkyl, and heterocycle can be substituted with one or more substituent groups selected from the group consisting of  $OR^7$ ,  $NR^7R^8$ ,  $SR^7$ ,  $S(O)R^7$ ,  $SO_2R^7$ ,  $SO_3R^7$ ,  $CO_2R^7$ , CN, oxo  $CONR^7R^8$ ,  $N^+R^7R^8R^9A^-$ , alkyl, alkenyl, alkynyl, aryl, cycloalkyl, heterocycle, arylalkyl, quaternary heterocycle, quaternary heteroaryl,  $P(O)R^7R^8$ ,  $P^+R^7R^8A^-$ , and  $P(O)(OR^7)OR^8$ ; and

said  $R^y$  alkyl, alkenyl, alkynyl, polyalkyl, polyether, aryl, haloalkyl, cycloalkyl, and heterocycle can optionally have one or more carbons replaced by O,  $NR^7$ ,  $N^+R^7R^8A^-$ , S, SO,  $SO_2$ ,  $S^+R^7A^-$ ,  $PR^7$ ,  $P(O)R^7$ ,  $P^+R^7R^8A^-$ , or phenylene; and

$R^{13}$ ,  $R^{14}$ , and  $R^{15}$  are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, polyalkyl, polyether, aryl, arylalkyl, alkylarylalkyl, alkylheteroarylalkyl, alkylheterocyclalkyl, cycloalkyl, heterocycle, heteroaryl, quaternary heterocycle, quaternary heteroaryl, heterocyclalkyl, heteroarylalkyl, quaternary heterocyclalkyl, quaternary heteroarylalkyl, alkylammoniumalkyl, and carboxyalkylaminocarbonylalkyl, and

said  $R^{13}$ ,  $R^{14}$ , and  $R^{15}$  alkyl, alkenyl, alkynyl, arylalkyl, heterocycle, and polyalkyl optionally have one or more carbons replaced by O,  $NR^9$ ,  $N^+R^9R^{10}A^-$ , S, SO,  $SO_2$ ,  $S^+R^9A^-$ ,  $PR^9$ ,  $P^+R^9R^{10}A^-$ ,  $P(O)R^9$ , phenylene, carbohydrate, amino acid, peptide, or polypeptide, and

$R^{13}$ ,  $R^{14}$ , and  $R^{15}$  are optionally substituted with one or more groups selected from the group consisting of hydroxy, amino, sulfo, carboxy, alkyl, carboxyalkyl, heterocycle, heteroaryl, sulfoalkyl, quaternary heterocycle, quaternary heteroaryl, quaternary heterocyclalkyl, quaternary heteroarylalkyl, guanidiny,  $OR^9$ ,  $NR^9R^{10}$ ,  $N^+R^9R^{11}R^{12}A^-$ ,  $SR^9$ ,  $S(O)R^9$ ,  $SO_2R^9$ ,  $SO_3R^9$ , oxo,  $CO_2R^9$ , CN, halogen,  $CONR^9R^{10}$ ,  $SO_2OM$ ,  $SO_2NR^9R^{10}$ ,  $PO(OR^{16})OR^{17}$ ,  $P^+R^9R^{10}R^{11}A^-$ ,  $S^+R^9R^{10}A^-$ , and  $C(O)OM$ ; or

R<sup>13</sup> and R<sup>14</sup>, together with the nitrogen atom to which they are attached form a mono- or polycyclic heterocycle that is optionally substituted with one or more radicals selected from the group consisting of oxo, carboxy and quaternary salts; or

R<sup>14</sup> and R<sup>15</sup>, together with the nitrogen atom to which they are attached, form a cyclic ring; and

R<sup>9</sup> and R<sup>10</sup> are independently selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, acyl, heterocycle, ammoniumalkyl, arylalkyl, and alkylammoniumalkyl; and

R<sup>11</sup> and R<sup>12</sup> are independently selected from the group consisting of H, alkyl, alkenyl, alkynyl, aryl, arylalkyl, alkenylalkyl, alkynylalkyl, heterocycle, carboxyalkyl, carboalkoxyalkyl, cycloalkyl, cyanoalkyl, OR<sup>9</sup>, NR<sup>9</sup>R<sup>10</sup>, SR<sup>9</sup>, S(O)R<sup>9</sup>, SO<sub>2</sub>R<sup>9</sup>, SO<sub>3</sub>R<sup>9</sup>, CO<sub>2</sub>R<sup>9</sup>, CN, halogen, oxo, and CONR<sup>9</sup>R<sup>10</sup>, wherein R<sup>9</sup> and R<sup>10</sup> are as defined above; or

R<sup>11</sup> and R<sup>12</sup> together with the nitrogen or carbon atom to which they are attached form a cyclic ring; and

R<sup>16</sup> and R<sup>17</sup> are independently selected from the substituents constituting R<sup>9</sup> and M; and

R<sup>7</sup> and R<sup>8</sup> are hydrogen; and

one or more R<sup>x</sup> are independently selected from the group consisting of alkoxy, alkylamino and dialkylamino; or

a pharmaceutically acceptable salt, solvate, or prodrug thereof.

Claim 354 (new): A compound of claim 353 wherein R<sup>1</sup> and R<sup>2</sup> are each n-butyl.

Claim 355 (new): A compound of claim 354 wherein t is 1, R<sup>y</sup> is OR<sup>13</sup>.

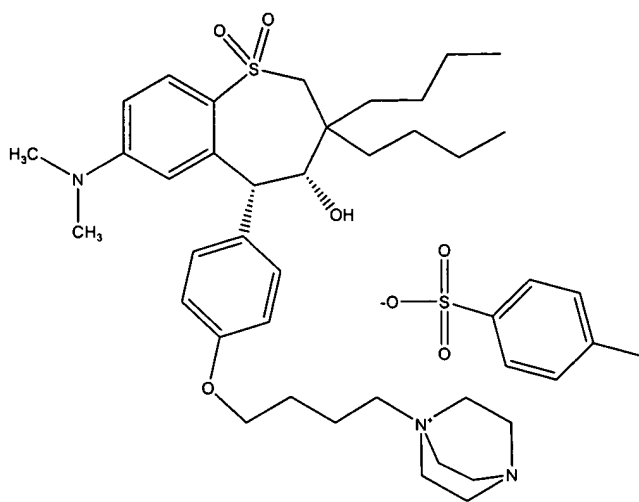
Claim 356 (new): A compound of claim 355 wherein one or more  $R^x$  are independently selected from methoxy and dimethylamino.

Claim 357 (new): A compound of claim 355 wherein  $R^x$  is dimethylamino.

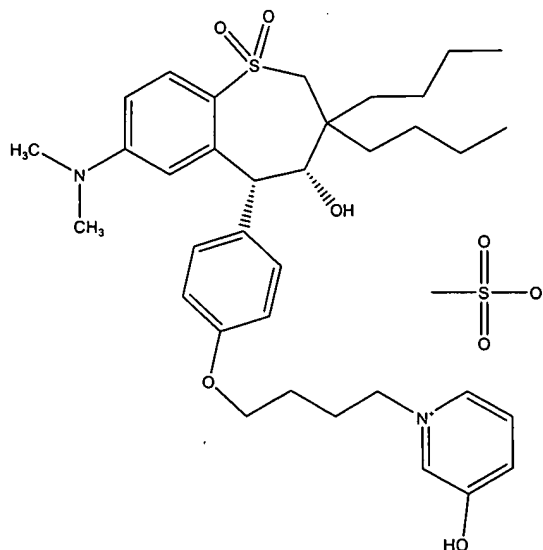
Claim 358 (new): A compound of claim 355 wherein:  
 $R^y$  is para-OR<sup>13</sup> or meta-OR<sup>13</sup>.

Claim 359 (new): A compound of claim 355 having the 4R,5R configuration.

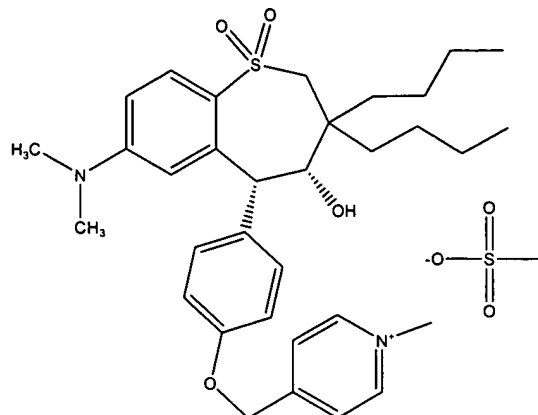
Claim 360 (new): The compound of claim 353 having the structural formula:



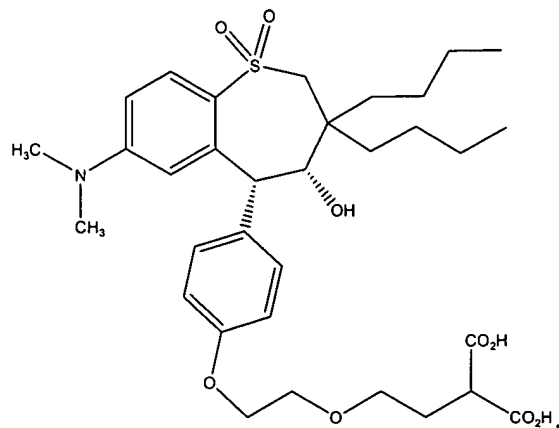
Claim 361 (new): The compound of claim 353 having the structural formula:



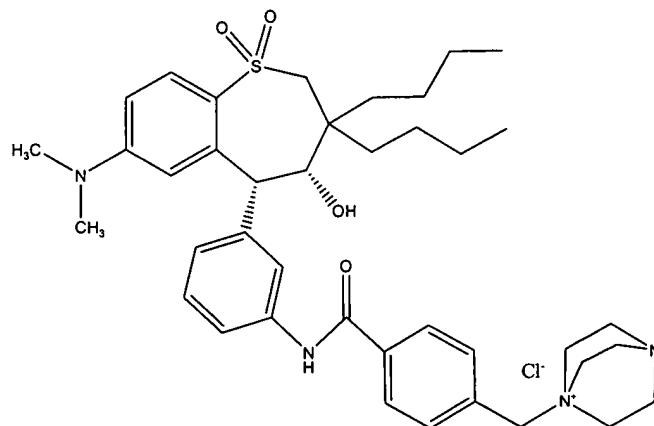
Claim 362 (new): The compound of claim 353 having the structural formula:



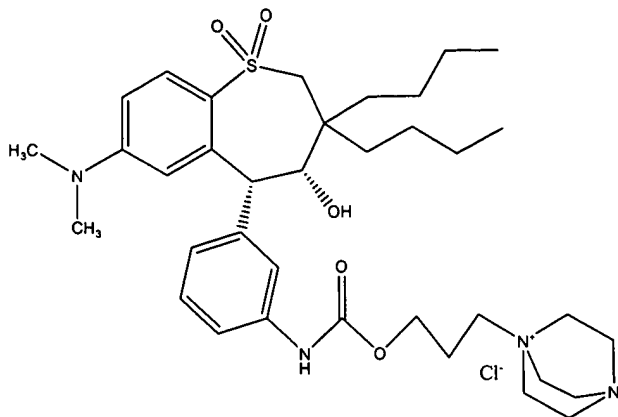
Claim 363 (new): The compound of claim 353 having the structural formula:



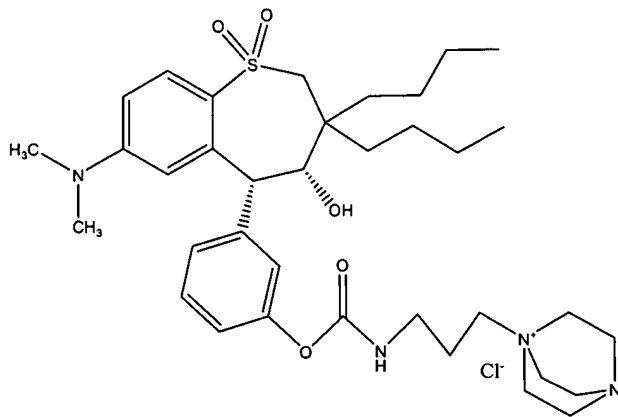
Claim 364 (new): The compound of claim 353 having the structural formula:



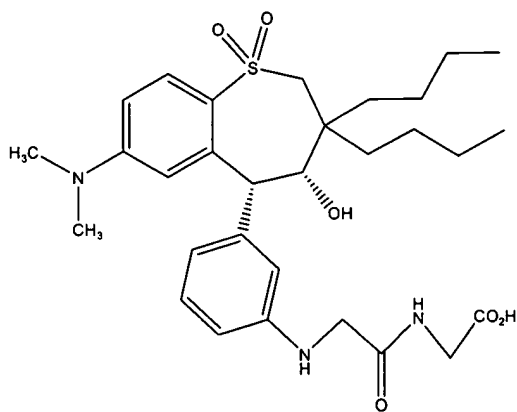
Claim 365 (new): The compound of claim 353 having the structural formula:



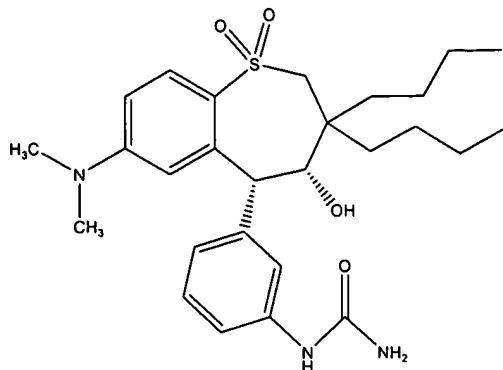
Claim 366 (new): The compound of claim 353 having the structural formula:



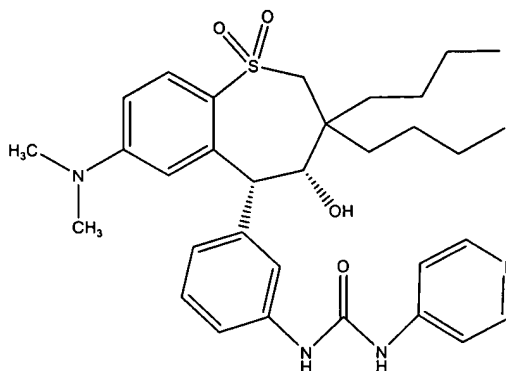
Claim 367 (new): The compound of claim 353 having the structural formula:



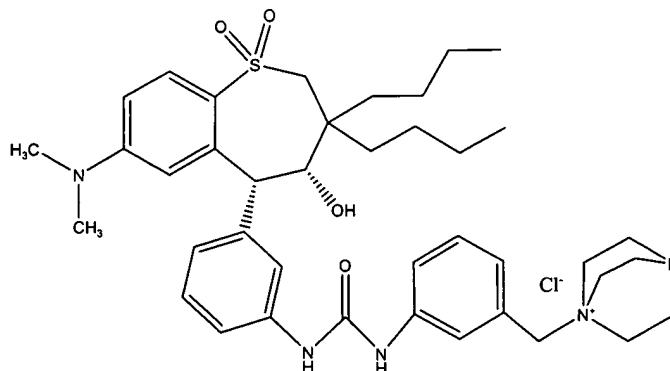
Claim 368 (new): The compound of claim 353 having the structural formula:



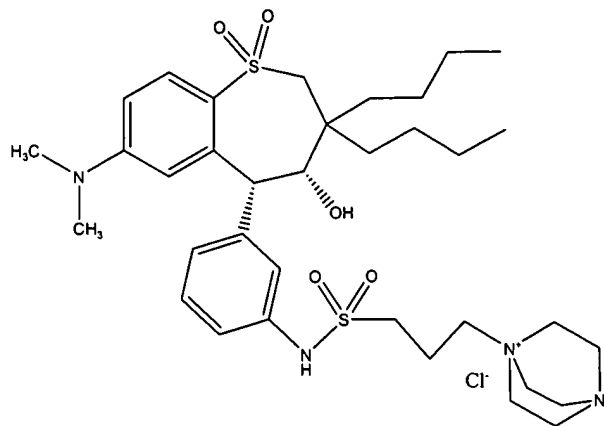
Claim 369 (new): The compound of claim 353 having the structural formula:



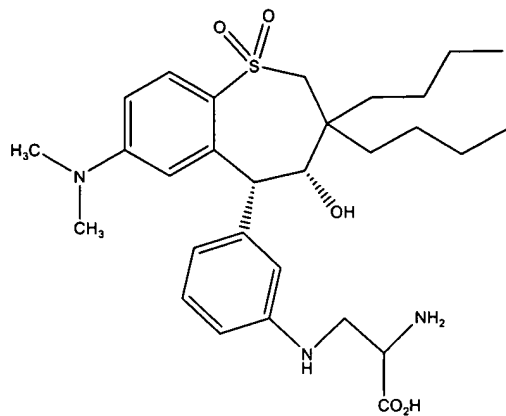
Claim 370 (new): The compound of claim 353 having the structural formula:



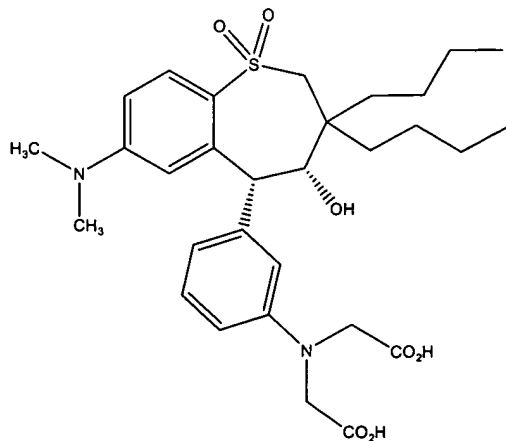
**Claim 371 (new):** The compound of claim 353 having the structural formula:



**Claim 372 (new):** The compound of claim 353 having the structural formula:

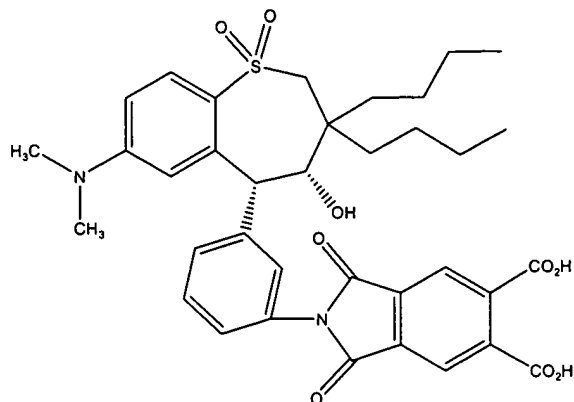


**Claim 373 (new):** The compound of claim 353 having the structural formula:

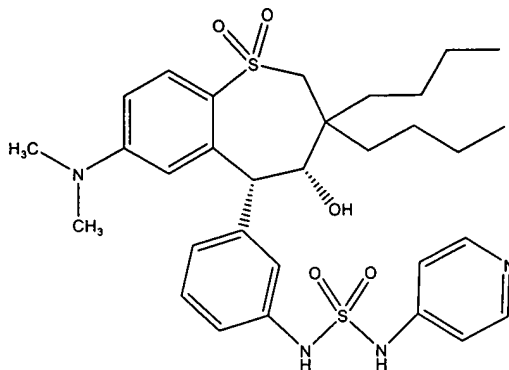




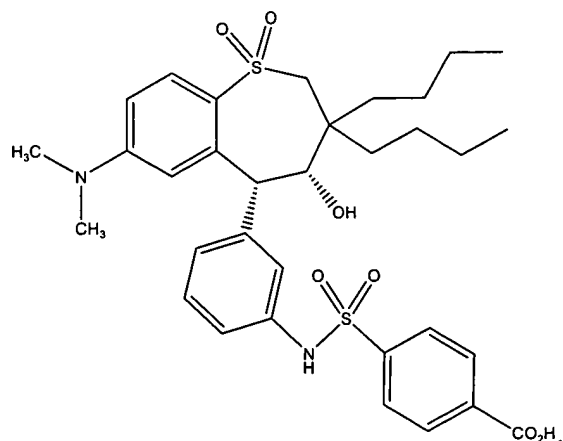
Claim 374 (new): The compound of claim 353 having the structural formula:



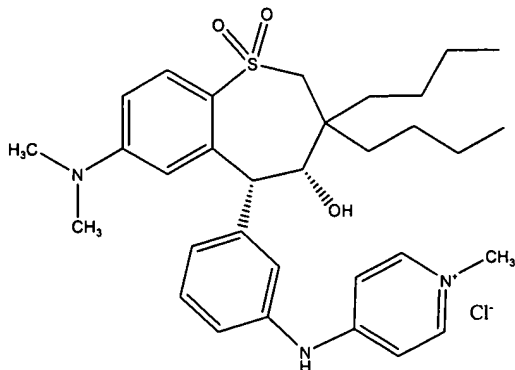
Claim 375 (new): The compound of claim 353 having the structural formula:



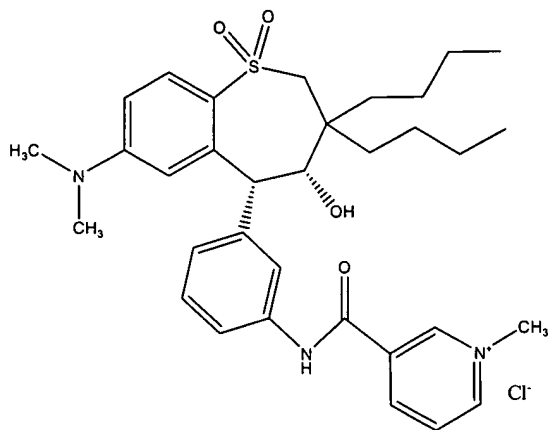
Claim 376 (new): The compound of claim 353 having the structural formula:



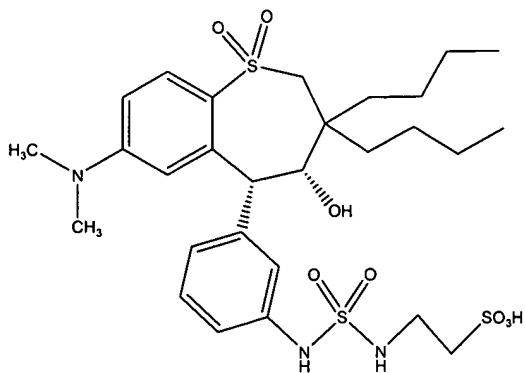
Claim 377 (new): The compound of claim 353 having the structural formula:



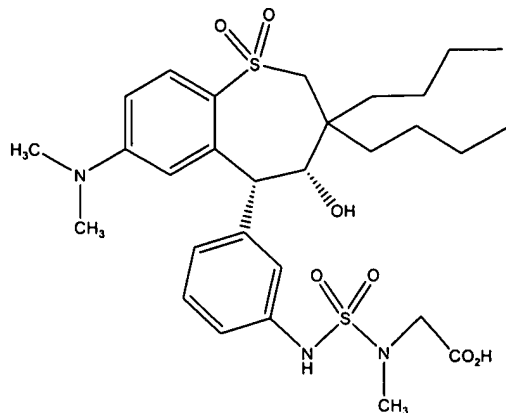
Claim 378 (new): The compound of claim 353 having the structural formula:



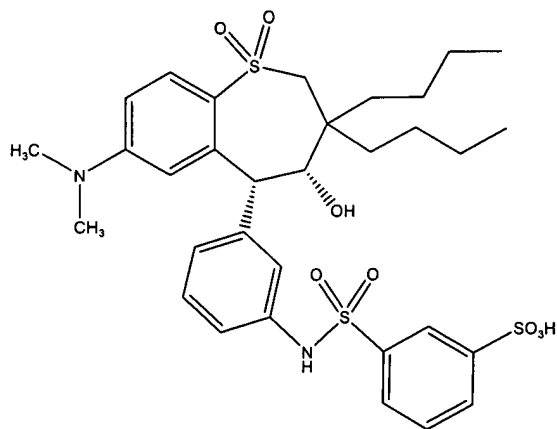
Claim 379 (new): The compound of claim 353 having the structural formula:



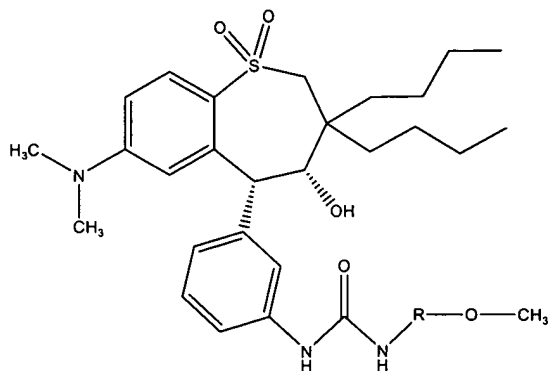
Claim 380 (new): The compound of claim 353 having the structural formula:



Claim 381 (new): The compound of claim 353 having the structural formula:



Claim 382 (new): The compound of claim 353 having the structural formula:



wherein R is PEG having a molecular weight of 5000 g/mol